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| APPLICATION 1 | NO. | FILING DATE | FIRST NAMED INVENTOR. | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|---------|-------------|-----------------------|--------------------------|-----------------|
| 10/076,063 | | 02/14/2002 | Daniel W. Konz | 38190/243259 | 8504 |
| 826 | 7590 | 05/12/2005 | | EXAMINER | |
| | N & BIR | | NGUYEN, VAN KIM T | | |
| BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 | | | ART UNIT | PAPER NUMBER | |
| CHARLOTTE, NC 28280-4000 | | | 2151 | | |
| | | | | DATE MAIL ED: 05/12/2006 | • |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | |
|--|--|--|--|--|--|--|--|
| | | 10/076,063 | KONZ ET AL. | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
| | | Van Kim T. Nguyen | 2151 | | | | |
| Period fo | The MAILING DATE of this communication ap | , | 1 | | | | |
| A SH THE - Exter after - If the - If NO - Failu Any | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a repropers of the reply is specified above, the maximum statutory period reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONEI | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | | |
| 1)🖂 | Responsive to communication(s) filed on <u>15 February 2002</u> . | | | | | | |
| 2a)□ | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | |
| 3)□ | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Dispositi | on of Claims | | | | | | |
| 5) | Claim(s) 1-35 is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) 1-35 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | wn from consideration. | | | | | |
| Applicati | on Papers | | | | | | |
| 9)[| The specification is objected to by the Examine | er. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | |
| 12) a)[| Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureasee the attached detailed Office action for a list | ts have been received. ts have been received in Application ority documents have been receive ou (PCT Rule 17.2(a)). | on No ed in this National Stage | | | | |
| Attachment | r(s) | · | | | | | |
| 1) Notice | e of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 3) 🔯 Inforn | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date <u>2/11/05,2/2/05</u> . | Paper No(s)/Mail Da 5) ☐ Notice of Informal Pa 6) ☑ Other: <u>See Continua</u> | atent Application (PTO-152) | | | | |

Continuation of Attachment(s) 6). Other: (PTO-1449) 8/1/03, 7/18/03, 10/15/02.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "30" has been used to designate both Low Pass Filter and Suppression Assemblies (Figure 6).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1, 11, 21, 23, and 32 are objected to because of the following informalities:

Claims 1 recites the limitation ""the group" on page 19: line 8. There is insufficient antecedent basis for this limitation in the claims.

Claims 11 recites the limitation ""the group" on page 21: line 20. There is insufficient antecedent basis for this limitation in the claims

Claims 23 recites the limitation ""the group" on page 24: line 3. There is insufficient antecedent basis for this limitation in the claims

Claims 32 recites the limitation ""the group" on page 25: line 28. There is insufficient antecedent basis for this limitation in the claims

Claim 21 recites the limitation "an LC low pass filter". It is not clear what an LC is.

Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-7, 11, and 13-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-35 of copending Application No. 10/076,188.

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-35 of the instant application have substantially all the limitations of patented claims 1-35; e.g., claims 1 an 7 of the instant application are merely broaden the scope of patented claims 1 and 2 by eliminating the local oscillator and the spread-spectrum clock. It

has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before.

Similarly, claims 11, 23, and 32 of the instant application recite substantially all the limitations of patented claims 10 and 11; 23 and 24; and 32, respectively.

Similarly, claims 2, 3, 4, 8, 9, and 10 of the instant application recite substantially all the limitations of patented claims 6, 7, 8, 3, 5, and 4, respectively.

Similarly, claims 5-6 of the instant application recite substantially all the limitations of patented claim 9 since it is obvious a low pass filter is capable of removing at least one high frequency component from the messages.

Similarly, claims 12-22 and 28-35 of the instant application recite substantially all the limitations of patented claims 12-22 and 28-35, respectively.

Similarly, claims 24, 25, 26, and 27 of the instant application recite substantially all the limitations of patented claim 25, 26, 27, and 23, respectively.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-7, 11, are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson et al (US 5,671,249), hereinafter Andersson, in view of Curtis et al (US 5,223,806), hereinafter Curtis.

Regarding claims 1, 7, and 11, as shown in Figures 1-6, Andersson discloses a network comprising:

a network bus electrically connected to at least one network device (Fig. 1: 30, Fig. 2: 110; col. 2: lines 31-35); and

a network controller (Fig. 1: 10, Fig. 2: 130) for directing communications with the at least one network device via the network bus, wherein the network controller is capable of selectively operating in either mode selected from the group consisting of a synchronous mode and an asynchronous mode (col. 2: lines 31-44), wherein the network controller is capable of transmitting messages and clock signals (system and backplane clock) via the network bus in the synchronous mode (col. 2: lines 44-46).

Andersson also discloses in the asynchronous mode the network controller is capable of transmitting messages without any accompanying clock signals via the network bus (e.g., external backplane clock is not required, col. 2: lines 55-56; col. 5: lines 32-33).

Though Andersson does not explicitly teach the network controller capable of transmitting messages at a predetermined bit rate in the asynchronous mode, it is a feature well known in the art, i.e., data can be sent and received at a pre-designated transmission rate as long as sufficient system resources are provided; thus it would be obvious to one of ordinary skill in

the art at the time the invention was made to provide adequate system resources if transmitting data at a predetermined bit rate is desired.

However, Andersson is silent on at least one suppression assembly electrically connected between the network bus and respective network devices, wherein each suppression assembly is capable of limiting electromagnetic emissions from the respective network devices communicating via the network bus.

As shown in Figures 1-6, Curtis discloses a suppression assembly electrically (Figs. 1-2: 16, 18, 22) connected between the network bus (Figs. 1-2: 20, 20A) and respective network devices (Figs. 1-2: 12, 18), wherein each suppression assembly is capable of limiting electromagnetic emissions from the respective network devices communicating via the network bus (abstract; and col. 3: lines 9-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Curtis' method of reducing electromagnetic interference and emission in Andersson's system, motivated by the need of improving quality of data transmission.

Regarding claims 2 and 13, the combination of Andersson and Curtis also discloses the network bus comprises unshielded differential twisted-pair wires (Andersson: col. 1: lines 46-48; Curtis: col. 3: lines 12-14), and wherein each suppression assembly comprises an isolation transformer (90; col. 4: lines 40-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Curtis' method of reducing electromagnetic interference and emission in Andersson's system, motivated by the need of improving quality of data transmission.

Regarding claims 3 and 14, as shown in Fig. 2, Curtis also discloses each isolation transformer (90) includes a primary coil (90A) located proximate a respective network device and a secondary coil (90B) located proximate the network bus, wherein the primary coil and secondary coil include a primary center tap (109) and a secondary center tap (102), respectively, and wherein each suppression assembly further comprises:

a low impedance capacitor (108) electrically connected between the primary center tap (109) and a ground (104, 107, G_L); and

a resistor electrically (82, 92) connected between the secondary center tap (102) and the ground (104, 107, G_L).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Curtis' method of reducing electromagnetic interference and emission in Andersson's system, motivated by the need of improving quality of data transmission.

Regarding claims 4 and 15, as shown in Fig. 2, Curtis also discloses the at least one suppression assembly further comprises a common mode choke (96) electrically connected between the isolation transformer (90) and the network bus (20, 20A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Curtis' method of reducing electromagnetic interference and emission in Andersson's system, motivated by the need of improving quality of data transmission.

Regarding claims 5 and 16,as shown in Fig. 2, Curtis also discloses the at least one suppression assembly further comprises a low pass filter (88) electrically connected between the transceiver and the isolation transformer 90 (col. 4: lines 37-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Curtis' method of reducing electromagnetic interference and emission in Andersson's system, motivated by the need of improving quality of data transmission.

Regarding claims 6 and 17, Curtis also discloses the at least one network device (16, 18, 22) is capable of transmitting and receiving messages via the network bus (20, 20A), wherein the at least one suppression assembly includes a low pass filter capable (88) of removing at least one high frequency component (typical attribute of a low pass filter, i.e., only passes low frequencies), from the messages (Curtis, col. 4: lines 37-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Curtis' method of reducing electromagnetic interference and emission in Andersson's system, motivated by the need of improving quality of data transmission.

Regarding claim 7, Curtis also discloses each network device (10) comprises a remote device (12), and a network device interface element (16) electrically connected between the network bus (20, 20A) and respective remote devices (10), wherein each suppression assembly is electrically connected between a respective network device interface element and the network bus.

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It would have been obvious to one of ordinary skill in the art at the time the invention

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was made to utilize Curtis' method of reducing electromagnetic interference and emission in

Andersson's system, motivated by the need of improving quality of data transmission.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Van Kim T. Nguyen whose telephone number is 571-272-3073.

The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Zarni Maung, can be reached on 571-272-3939. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Van Kim T. Nguyen

Examiner

Art Unit 2151

vkn

Zarni Maung

SUPERVISORY PATENT EXAMINER